

Materials & Tests Unit



NCDOT

2012 Specifications

Ready Mix Concrete Plant Inspection Checklist Addendum

The following items are to be verified (if applicable) during the NRMCA plant inspection for concrete plants seeking NCDOT Certification. If a plant is actively producing concrete for use on a NCDOT project all items must be verified. If the plant is not active (i.e. has not produced concrete for use on a NCDOT project in the last 2 months or does not intend to produce concrete for the next 2 months) only those items in *italics* need to be verified. (Please circle a response for each item)

Aggregates

Pass	Fail	N/A	Aggregates are listed on approved list maintained by the Department.
Pass	Fail	N/A	Aggregates stockpiled at plant are confirmed by Department's approved concrete mix designs. (If the plant is currently providing material for a NCDOT project, then the source and size of aggregates should be verified to comply with the approved mix design.)
Pass	Fail	N/A	Aggregate stockpiles maintained above Saturated Surface Dry (SSD) condition.
Comments:			

Cement and Fly Ash

Pass	Fail	N/A	Proper Bill of Lading and material certifications are on hand as outlined in Department's policy for tracking cement and fly ash suppliers. (See attached policy letter)
Pass	Fail	N/A	Verify cement and fly ash sources with Department approved concrete mix design. (If the plant is currently providing material for a NCDOT project, then the sources should be verified to comply with the approved mix design.)
Comments:			

Water

Pass	Fail		Source in compliance with Department specifications and has been tested in the last 12 months.
Pass	Fail		Source has been sampled by M&T Technician within the last 12 months with passing results.
Comments:			

Mix Proportions

Pass	Fail	N/A	Department approved concrete mix designs are on site and match materials on site. (If applicable)
Pass	Fail	N/A	Concrete mix design proportions adjusted for moisture content according to Department procedures.
Pass	Fail	N/A	Maintenance of permanent record of the quantity of cementitious materials, aggregates, water, and admixtures batched per load. Digital and graphical recorders provide printed records. Plants without either type of recorder maintain documentation of the batch quantities. The documentation is retrievable upon demand.
Comments:			

Moisture Content

Pass	Fail	N/A	Percent total moisture for each aggregate type determined by Department's Certified Batcher during inspection.
Pass	Fail	N/A	Moisture equipment, including moisture probes, checked for accuracy and proper working operation.
Pass	Fail	N/A	Review moisture calculations.
Comments:			

Routine Duties

Pass	Fail	N/A	Regular daily checks on cement received and used. (Does the BOL and Certifications match what is called for in the mix design?)
Pass	Fail	N/A	Constant testing and checking moisture contents of aggregates. (Minimum of two checks, one at start up each day and one in the mid afternoon. Additional checks may be needed if weather conditions dictate. [rain, wind, high temps, etc])
Pass	Fail	N/A	Daily report prepared and batch weight tickets kept on site for 60 days
Comments:			

Equipment

Pass	Fail	All equipment used in the batching operations has been calibrated within the last 12 months. Scales and dispensing devices must be calibrated by a third party entity or the manufacturer.
Pass	Fail	All the equipment used in the quality control sampling and testing has been calibrated within the last 12 months if applicable and is in good working condition. Scales, unit weight containers, chace indicators, and compression machines must be calibrated by a third party entity or the manufacturer. Slump cone, air pot/roller meters, and moisture detection devices may be calibrated by certified technician.
Comments:		

Certifications

Pass	Fail	<p><i>All personnel have current Department certifications for their job responsibility</i></p> <p>NCDOT Concrete Field Technician</p> <table border="1"> <thead> <tr> <th>Name</th><th>Certification Number</th><th>Expiration Date</th></tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>NCDOT Concrete Batch Technician</p> <table border="1"> <thead> <tr> <th>Name</th><th>Certificate Number</th><th>Expiration Date</th></tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>NCDOT Concrete Mix Design Technician</p> <table border="1"> <thead> <tr> <th>Name</th><th>Certificate Number</th><th>Expiration Date</th></tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Name	Certification Number	Expiration Date							Name	Certificate Number	Expiration Date							Name	Certificate Number	Expiration Date						
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Pass	Fail	Plant has been approved and displays current Department Plant Certification																											
Comments:																													

Date of Inspection: _____

Last date of producing concrete for a NCDOT project: (estimate) _____

Possible date of next concrete production for NCDOT project: (estimate) _____

Inspecting Engineer's Signature: _____

Inspected Engineer Name (Printed) _____

Document was revised in November 2014